CFLRP Project Effects on Mesa Fire

The Mesa Fire started July 27, 2018 on private land as a human-caused fire when a motorist on Idaho State Highway 95 had a tire blow out. The fire, immediately southeast of Council, quickly burned 14,825 acres of private and the Payette NF land in the first burning period. The following burning period on July 28 increased the acreage by 10,736 acres. The majority of the firefighting efforts in the first two burning periods focused on the private homes and structures immediately east of the community.



On July 29, with near record high temperatures in Council, and moderate to strong winds across the fire, Great Basin Type 2 Team 6 assumed command of the fire. With additional resources on hand, firefighting efforts began in earnest in the northeastern divisions of the fire on Payette NF lands in the Cottonwood Creek drainage.

Prior to the wildfire, the Forest, working under the Collaborative Forest Landscape Restoration Program's (CFLRP) Mill Creek-Council Mountain Landscape Restoration Project, conducted commercial thinning, pre-commercial thinning and applied prescribed fire to the area. The most recent use of prescribed fire was to burn the west facing slopes of the North Fork of Cottonwood Creek, and in Cookhouse Gulch in the spring of 2018. Additionally, commercial thinning in the drainage had been done the year before. These fuel treatments within the Cottonwood Creek drainage provided notable benefits during the management of the Mesa Fire as wildfire entered several of the treated areas from July 28th through July 29th.

As the fire entered the Cottonwood drainage from private land at the height of the burning period, it was a

high intensity, crowning wildfire.

This high intensity fire burned through the initial forest lands that had

lands that had been treated with fuel lower Cottonwood Creek. reduction projects, but as it

burned through the area, the fire began to lose its steam.

The importance of the strategic placement of these treatments cannot be overstated. Cottonwood Creek is a large, deep drainage that aligns with the prevailing southwest winds. Extreme fire behavior occurred July 27th, 28th and 29th. This included rapid upslope runs, crown fire, and long range spotting.

As the fire burned into the mid-slopes of the Cottonwood Creek drainage, the treatments further slowed the up-drainage spread of the fire, and reduced

fire intensity in the form of less torching and no crown fire. This allowed

Mid slane treated area Macelles

Mid-slope treated area. Needles remained on trees after the wildfire passed through.

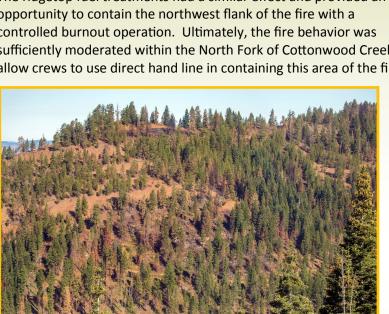
ground resources and aircraft to safely and effectively complete a burnout operation that prevented further spread to the north and northwest towards the town of Council and outlying infrastructure.

The burnout utilized a recently completed prescribed fire unit that had prior vegetation treatments. The placement of the treatment and the change in fuel composition were important in the success of this operation. The map on the opposite page shows the location of the fuels treatments with an overlay of the Mesa Fire perimeter.

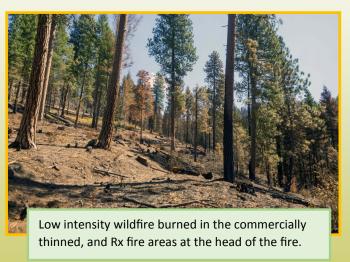
Within the area of the burnout operation, the vegetation and fuel treatments resulted in a low-intensity burn. While some tree torching took place, no crown fire occurred in the treated areas. The overall result of the burnout operation was low to moderate severity. In Ponderosa Pine stands, low severity burning was observed, as light surface fuels were consumed and limited canopy scorch occurred.

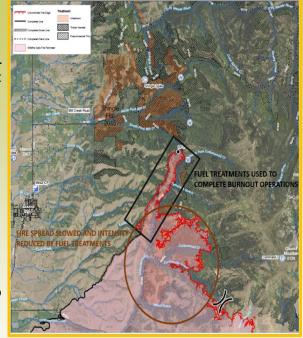
The placement of the treatments at the confluence of Cottonwood Creek, the North Fork of Cottonwood Creek, and Cookhouse Gulch moderated the fire behavior at a location where intensity would normally increase throughout the burn period, with a typical result being a stand replacing wildfire.

The ridgetop fuel treatments had a similar effect and provided an opportunity to contain the northwest flank of the fire with a controlled burnout operation. Ultimately, the fire behavior was sufficiently moderated within the North Fork of Cottonwood Creek to allow crews to use direct hand line in containing this area of the fire.



Commercially thinning and prescribed fire on the northwest side of Cookhouse Gulch. The prior fuels reduction work led to this ridgeline being secured and easily held as the fire moved through.







Cottonwood Creek Road in April of 2018.

Low intensity wildfire effects were observed within prescribed fire burn units within the Cottonwood Creek drainage.